



# The Year Lost to the Pandemic: Reviewing the impact of COVID-19 on Education in India

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## Abstract

The COVID-19 pandemic started in India in March 2020 and has been affecting the country for more than a year now, and it has forced most educational institutions in the country to suspend physical instruction for months. During this period, millions of students have shifted to online platforms for learning, which has gained prominence as an effective educational medium. Millions of other students from rural, lower socioeconomic, and socially marginalized backgrounds who lack access to distance and online learning have also been pushed to the brink of dropping out during this period. Since the number of new and active cases has dropped significantly in the previous few months, physical classes have been allowed to resume in all parts of India as of March 2021. In this review paper, the effect of the year-long disruption to the Indian education sector has been discussed to highlight the main challenges faced by students, teachers, and educational institutions during this period.

**Keywords:** COVID-19, Pandemic, Education, Educational institutions, Digital transformation

## 1. Introduction

As of March 2021, it has been exactly one year since the first social restrictions were introduced in India in response to the rising

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COVID-19 cases. On March 16, 2020, the Government of India announced the closure of all educational institutions, effectively suspending physical classes for over 300 million students in India (MHFW, 2020; Times of India, 2020). It was shortly followed by a series of nationwide lockdowns, which began on March 25, 2020, and a number of social restrictions are still in place even after a year (Gupta & Goplani, 2020; UNESCO, 2021). In this review paper, the impact of the COVID-19 pandemic on the education sector in India has been discussed by recounting major events from the past year (March 2020-March 2021). The consequences of the pandemic and lockdowns on Indian students have been highlighted after surveying research and news publications during the past year and assessing the existent capacity of the Indian educational system to withstand those disruptions.

## **2. Effects of the pandemic and lockdowns on Education in India**

India has a vast education network comprising 320 million students across 1.5 million schools, 993 universities, and 39,931 colleges (AISHE, 2021; Deka, 2021). Out of the 320 million students, more than 80 percent reside in rural areas, while 70 percent attend government schools or colleges (Alvi & Gupta, 2020). When the government announced the closure of educational institutions and the indefinite postponement of exams and entrance tests in March 2020, there were hardly any preparations made for the switch to online learning that was to follow. The education sector in India has been disproportionately affected by the pandemic as physical classes remained suspended for most parts of 2020 even while other social institutions opened up and most social mobility restrictions were gradually lifted. At present, physical classes at school and college levels have resumed in most states, albeit in lesser capacity than in the pre-pandemic times. During this one year of the pandemic, the learning process was disrupted in some way for 99 percent of the Indian student population (United Nations, 2020a). However, the extent of the damage caused by the pandemic is not fully known, and the national data for the upcoming academic sessions will provide some indication of the pandemic's impact on India's education sector.

During the lockdown, the Ministry of Human Resource Development and the United Grants Commission (UGC) encouraged educational institutions and students to continue learning through distance and online mediums. They promoted the use of a number of online portals for free courses and academic resources (Swayam, Diksha, E-pathshala, etc.) and also transmitted academic content through television and radio (Jena, 2020; MOE, 2020; UGC, 2020). The rapid switch to digital learning was made easier by the availability of a range of free online educational resources, and millions of Indian students have been continuing with online classes since the onset of the pandemic (Dhawan, 2020; Raj & Khare, 2020). However, amidst the growing public acclamation to the success of online learning, the issue of lack of access to distance and online learning for a bigger proportion of the student population has not received mainstream attention. Almost all Indian students have been affected by the pandemic, along with teachers, parents, and administrators involved in the education process. However, the issues they've faced vary widely across important social-demographic parameters, and a number of pertinent issues that emerged during the previous year have been reviewed below.

## **2. a. Access to distance and online learning**

India is still predominantly rural and agrarian, and the majority of students reside in villages with rudimentary access to the Internet or other means of communication. Only 24 percent of Indian households have Internet connections, and this figure dropped to 15 percent for rural areas (NSS, 2019). Among rural households with school-going children, only one-third have at least one smartphone in the house (The Hindu, 2020). Moreover, at least 53 percent of households in India receive less than 12 hours of electricity per day, and more than 50,000 villages still have no mobile network coverage (Kundu, 2020; Deka, 2021). These figures are particularly worse for the marginalized and socially disadvantaged families, and among the poorest 20 percent households, only nine percent have access to the Internet and three percent to computers (IMAI, 2019; United Nations, 2020b). Despite the efforts by the government to ramp up distance learning as the effects of the pandemic persist in 2021. There are serious limitations

in the existing development infrastructures to reach millions of children who have been left out (Vyas, 2020). This digital inequality is evident across class, age, gender, and region, and the year-long disruption in classes has disproportionately affected those students already at higher risk for dropping out.

## **2. b. Disruptions in educational enrolment and dropout**

Since March 2020, the lockdowns and subsequent restrictions in social mobility have also disrupted networks based on educational institutions and social welfare systems. The Mid-day Meal (MDM) program in India is the largest school-based feeding program in the world and caters to 144 million children, mostly from rural areas (Alvi & Gupta, 2020). The program has been credited for significantly improving enrolment, attendance, and retention of students in schools and school closures during the lockdown have severely affected its functioning and increased the rates of student dropout (Singh & Fernandes, 2018; Vyas, 2020). Once school children discontinue schooling or take up work, it is difficult to bring them back to school, and it has become evident with lower school enrollment rates in 2020 compared to previous years (ASER, 2021; Gettleman & Raj, 2020). Economic factors are critical in education uptake, and the pandemic and lockdown have severely affected the most economically vulnerable sections, such as migrants and unorganized sector workers, who may be unable to send their children to schools due to financial constraints (Modi & Postaria, 2020). Most of the state-funded schools and colleges also do not have the adequate resources to support distance or hybrid learning, and the disruptions due to the pandemic have prevented rural students from even receiving textbooks and other basic academic resources during the previous year (ASER, 2021; The Hindu, 2020). Students from rural, lower socioeconomic, and socially marginalized backgrounds do not have the necessary infrastructure or financial prowess to avail resources for online education, and even retaining these students post-pandemic would be a huge accomplishment (Srivastava et al., 2020).

## **2. c. Suspension of physical instruction and examinations**

During the previous year, some of the pertinent issues in Indian education that received mainstream attention were related to the

efficacy of online instruction, the effects of postponement of transition exams, and the mental health of students, teachers, and parents (Narmada & Somasundaram, 2020; Vyas, 2020). The lockdown in March 2020 was announced without any prior notice, and it gave no time to students, teachers, and educational institutions to make preparations to shift to online learning mid-academic sessions (Daniel, 2020). The lockdown also prevented board exams and entrance tests from being conducted on schedule, which led to many students being stuck in transition to higher education or job prospects (Daniel, 2020). The difficulties posed by the pandemic, along with the pressures of maneuvering online learning, have negatively impacted the mental well-being of many students, teachers, and parents (Golechha, 2020; Grover et al., 2020). Among schools students, in particular, physical contact and social interaction in school settings are important precursors to psychosocial development, and the prolonged distance learning and social isolation have affected their academic progression and overall development and health (Srivastava et al., 2020). Teachers have been particularly hard done by the pandemic, and they have had to lead the way in figuring out online resources for education amid pandemic related restrictions, instability in remunerations and issues of access and competence for online education tools (Bhat et al., 2020; Joshi et al., 2020).

#### **2. d. Digital transformation of education**

The rapid digital transformation of educational processes has been one defining feature of the pandemic, and millions of Indian students have been learning online since April 2020. If a secure device and stable Internet are guaranteed, online educational platforms have the potential of delivering quality education that is fast, inexpensive, and flexible (Lourenco & Tasimi, 2020). Since the spread of COVID-19 has persisted in India for a year with no signs of ending, many educational institutions have opted to continue with online instruction, which has worked out favorably for them (Maity et al., 2020). WhatsApp Messenger has been the most widely used online tool for education purposes in India during the pandemic (Vyas, 2020). The proliferation of the free Internet market has ensured the easy availability of a range of free and subscription-based online tools to perform different educational

processes. However, gaining competency in effectively utilizing online tools has been a serious concern for both students and teachers, and it directly influences the quality of learning happening online (Dhawan, 2020; Joshi et al., 2020; Tyagi & Malik, 2020). The digital divide in access to the Internet and smart devices has been a global issue throughout the pandemic, and it is even more apparent in India, where millions of students lack computers or smartphones and/or stable Internet connections to access online courses and resources (Nguyen et al., 2020; Srivastava et al., 2020; UNICEF, 2020). Nonetheless, the pandemic period has also seen a record number of Indian students utilizing online modes of learning for the first time, with 90 million new users during the lockdown alone (Warjiri & Shah, 2020). It has also propelled India to become the second-largest market for E-learning, worth two billion dollars by 2021 (Research & Markets, 2020; United Nations, 2020a). The relative success of remote learning using online resources during a global pandemic has affirmed online learning as a legitimate educational process, which will probably become the norm for education in the near future.

### **3. Conclusion**

The COVID-19 pandemic and its related social restrictions continue to persist even after a year in March 2021, and during this period, it has disrupted the basic fabric of social existence and caused huge loss of life, health, economy, and employment. The education sector in India has been severely impacted by the pandemic, and millions of students have missed out on academic instruction for months and even up to a year. During the one-year period, millions of Indian students hastily shifted to online mediums for education. At the same time, another group of millions of students from rural, lower socioeconomic, and socially marginalized backgrounds missed out on any academic instruction and are at the risk of dropping out of school. Fortunately, things are looking up as physical instruction in schools and colleges has resumed in some capacity in all Indian states as of March 2021 (Chopra, 2021; India Today, 2020). In this regard, the rural areas are at an advantage as a majority of new COVID-19 cases in India are clustered in urban spaces, thus increasing the chances of continued physical

instruction in schools and colleges. With months of experience in using online educational tools, they are being retained and integrated into hybrid classrooms by institutions staggering towards pre-pandemic levels. The gradual return to normalcy in social life is a promising sign for the education sector as well, which has witnessed a positive turn this year with record sales of notebooks and computer devices along with millions of Indian students entering the digital space during the previous year (Kala, 2021). While the government mobilizes resources to contain new cases and vaccinate the population, the immediate focus in the education sector needs to be towards increasing technological educational innovations, emboldening state and private educational partnerships, and reducing the digital divide among students (Mishra et al., 2020). With the implementation of the National Education Policy, as well in 2021, educational institutions and systems in India need a serious restructuring to offer a better quality of education with more extensive coverage, regardless of how the pandemic pans out.

## References

- All India Survey on Higher Education (AISHE) (2021). Directory of Institutions. <http://aishe.nic.in/aishe/home>
- Alvi, M., & Gupta, M. (2020). Learning in times of lockdown: how Covid-19 is affecting education and food security in India. *Food security*, 12(4), 793-796. <https://doi.org/10.1007/s12571-020-01065-4>
- Annual State of Education Report (ASER) (2021, February 1). *Annual Status of Education Report (Rural) 2020 Wave 1*. [http://img.asercentre.org/docs/ASER%202021/ASER%202020%20wave%201%20-%20v2/aser2020wave1report\\_feb1.pdf](http://img.asercentre.org/docs/ASER%202021/ASER%202020%20wave%201%20-%20v2/aser2020wave1report_feb1.pdf)
- Bhat, R., Singh, V. K., Naik, N., Kamath, C. R., Mulimani, P., & Kulkarni, N. (2020). COVID 2019 outbreak: The disappointment in Indian teachers. *Asian journal of psychiatry*, 50, 102047. <https://dx.doi.org/10.1016%2Fj.ajp.2020.102047>
- Chopra, R. (2021, March 4). Explained: What will change for students & staff when schools reopen? *Indian Express*. <https://indianexpress.com/article/explained/how-and-when-will-schools-reopen-what-will-change-for-students-6704619/>
- Daniel, J. (2020). Education and the COVID-19 pandemic. *Prospects*, 49(1), 91-96. <https://doi.org/10.1007/s11125-020-09464-3>

- Deka, K. (2021, January 3). Covid-19 fallout: The impact on education in India. *India Today*. <https://www.indiatoday.in/magazine/news-makers/story/20210111-school-of-hard-knocks-1755078-2021-01-03>
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22. <https://doi.org/10.1177%2F0047239520934018>
- Gettleman, J., & Raj, S. (2020, October 8). As Covid-19 Closes Schools, the World's Children Go to Work. *The New York Times*. <https://www.nytimes.com/2020/09/27/world/asia/covid-19-india-children-school-education-labor.html>
- Golechha, M. (2020). COVID-19, India, lockdown and psychosocial challenges: What next?. *International Journal of Social Psychiatry*, 66(8), 830-832. <https://doi.org/10.1177%2F0020764020935922>
- Grover, S., Goyal, S. K., Mehra, A., Sahoo, S., & Goyal, S. (2020). A Survey of Parents of Children Attending the Online Classes during the Ongoing COVID-19 Pandemic. *The Indian Journal of Pediatrics*, 88(280). <https://doi.org/10.1007/s12098-020-03523-5>
- Gupta, A., & Goplani, M. (2020). Impact of COVID-19 on Educational Institution in India. *Purakala Journal U (CARE Listed)*, 31(21). [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3679284](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3679284)
- India Today (2020, December 30). Schools Reopening: These states will resume normal classes in schools from January 2021. *India Today Web Desk*. <https://www.indiatoday.in/education-today/news/story/schools-reopening-these-states-will-resume-normal-classes-in-schools-from-january-2021-1754482-2020-12-30>
- Internet and Mobile Association of India. (2019). *India Internet 2019*. Nielson. <https://cms.iamai.in/Content/ResearchPapers/d3654bcc-002f-4fc7-ab39-e1fbeb00005d.pdf>
- Jena, P. K. (2020). Impact of pandemic COVID-19 on education in India. *International Journal of Current Research (IJCR)*, 12. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3691506](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3691506)
- Joshi, A., Vinay, M., & Bhaskar, P. (2020). Impact of coronavirus pandemic on the Indian education sector: perspectives of teachers on online teaching and assessments. *Interactive Technology and Smart Education*. <https://doi.org/10.1108/ITSE-06-2020-0087>
- Kala, R. R. (2021, February 19). Covid-19 Impact: India's notebook shipments at all-time high level in 2020. *Financial Express*. <https://www.financialexpress.com/industry/covid-19-impact-indias-notebook-shipments-at-all-time-high-level-in-2020/2197434/>
- Kundu, P. (2020, May 5). Indian education can't go online - only 8% of homes with young members have computer with net link. *Scroll*. <https://scroll.in/article/960939/indian-education-cant-go-online-only-8-of-homes-with-school-children-have-computer-with-net-link>



- Lourenco, S. F., & Tasimi, A. (2020). No participant left behind: conducting science during COVID-19. *Trends in Cognitive Sciences*, 24(2), 583 – 584. <https://doi.org/10.1016/j.tics.2020.05.003>
- Maity, S., Sahu, T. N., & Sen, N. (2020). Panoramic view of digital education in COVID-19: A new explored avenue. *Review of Education*. <https://doi.org/10.1002/rev3.3250>
- Ministry of Education (MOE) (2020). ICT Initiatives of Ministry of Education, Government of India, <https://www.education.gov.in/hi/ict-initiatives>
- Ministry of Health and Family Welfare (HFW) (2020, March 16). Press release on *High level Group of Ministers reviews current status, and actions for prevention and management of COVID-19*. Government of India. <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1606637>
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1, 100012. <https://doi.org/10.1016/j.ijedro.2020.100012>
- Modi, S., & Postaria, R. (2020, October 5). How COVID-19 deepens the digital education divide in India. *World Economic Forum*. <https://www.weforum.org/agenda/2020/10/how-covid-19-deepens-the-digital-education-divide-in-india/>
- Narmada, S., & Somasundaram, A. (2020). Preparedness for reopening and conduct of schools during and post covid-19 period. *Indian Journal of Practical Pediatrics*, 22(2), 217. <https://www.ijpp.in/Files/2020/ver2/Preparedness-for-Reopening.pdf>
- National Sample Survey (NSS) (2019). *Key Indicators of Household Social Consumption on Education in India (July 2017 – June 2018)*, Ministry of Statistics and Program Implementation, National Statistical Office. Government of India [http://mospi.nic.in/sites/default/files/publication\\_reports/KI\\_Education\\_75th\\_Final.pdf](http://mospi.nic.in/sites/default/files/publication_reports/KI_Education_75th_Final.pdf)
- Nguyen, M. H., Gruber, J., Fuchs, J., Marler, W., Hunsaker, A., & Hargittai, E. (2020). Changes in digital communication during the COVID-19 global pandemic: Implications for digital inequality and future research. *Social Media+ Society*, 6(3). <https://dx.doi.org/10.1177/2F2056305120948255>
- Raj, U., & Khare, S. (2020). Indian Education System in Fight against COVID-19 Pandemic. *The impact of COVID19 on the international education system*. Published: November 19. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3758853](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3758853)
- Research & Markets (2020, December 15). The Online Education Industry in India and the Impact of COVID-19. *CISION PR Newswire*. <https://www.prnewswire.com/news-releases/the-online-education-industry-in-india-and-the-impact-of-covid-19-301192732.html>

- Singh, S., & Fernandes, M. (2018). Home-grown school feeding: Promoting local production systems diversification through nutrition sensitive agriculture. *Food Security*, 10(1), 111-119. <https://doi.org/10.1007/s12571-017-0760-5>
- Srivastava, S., Singh, P., & Singh, V. P. (2020). Impact of COVID-19 on Education System in India: A Review. *IRE Journals*, 4(1). <https://www.irejournals.com/formatedpaper/1702399.pdf>
- The Hindu (2020, October 29). Special Correspondence: Nearly 20% of rural school children had no textbooks due to COVID-19 impact, finds ASER survey. <https://www.thehindu.com/news/national/coronavirus-20-of-rural-school-children-had-no-textbooks-due-to-covid-19-impact-finds-aser-survey/article32966299.ece>
- Times of India (2020, March 16). Govt announces closure of all educational establishments across India till March 31. <https://timesofindia.indiatimes.com/home/education/news/govt-announces-closure-of-all-educational-establishments-across-india-till-march-31/articleshow/74659627.cms>
- Tyagi, H., & Malik, S. (2020). Online teaching in Delhi-NCR schools in India during Covid-19 pandemic. *Indian Journal of Science and Technology*, 13(38), 4036-4054. <https://doi.org/10.17485/IJST/v13i38.1613>
- United Nations Educational, Scientific and Cultural Organization (UNESCO) (2021). *Education: From disruption to recovery*. <https://en.unesco.org/covid19/educationresponse>
- United Nations Children's Fund (UNICEF) (2020, September). *Education and COVID 19*. <https://data.unicef.org/topic/education/covid-19/>
- United Nations. (2020, August). Policy Brief: Education during COVID-19 and beyond. [https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg\\_policy\\_brief\\_covid-19\\_and\\_education\\_august\\_2020.pdf](https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf)
- University Grants Commission (UGC) (2020, April). *UGC Guidelines on Examinations and Academic Calendar for the Universities in View of COVID-19 Pandemic and Subsequent Lockdown*. [https://www.ugc.ac.in/pdfnews/4276446\\_UCG-Guidelines-on-Examinations-and-Academic-Calendar.pdf](https://www.ugc.ac.in/pdfnews/4276446_UCG-Guidelines-on-Examinations-and-Academic-Calendar.pdf)
- Vyas, A. (2020, September). Status report: Government and Private Schools during COVID 19. *OXFAM India*. <https://www.oxfamindia.org/sites/default/files/2020-09/Status%20report%20Government%20and%20private%20schools%20during%20COVID%20-%202019.pdf>
- Warjri, L., & Shah, A. (2020, June). India and Africa: Charting a Post-COVID-19 Future. ORF Special Report No. 111, *Observer Research Foundation*.